Global Projects for a Sustainable Future

WICE has projects around the globe that aim to create lasting environmental and social impacts by promoting sustainable economic growth through empowering local communities.

These initiatives are designed to address pressing global challenges while fostering inclusive and equitable solutions. Through innovative approaches and strategic partnerships, WICE is at the forefront of human wellbeing and sustainable development.

1. The Pacific Islands Conservation Initiative (PICI) Cook Islands Turtle Project,

PROJECTS

Pacific Islands

PICI Nesting Suitability Survey of Rarotonga is a conservation project focused on assessing the potential of Rarotonga's beaches as suitable nesting sites for endangered sea turtles. This initiative, led by the Pacific Islands Conservation Initiative, seeks to understand current nesting conditions and identify the most suitable areas for nesting activity. The project entails surveying beaches across Rarotonga to collect critical data on beach composition, slope, vegetation, human disturbances, and other environmental factors that influence sea turtle nesting. Using this data, the PICI team aims to map optimal nesting sites and recommend protective measures to ensure these locations support future turtle populations. The findings will guide conservation efforts, inform local communities, and support broader marine conservation strategies in the Cook Islands. Through collaboration with local authorities, researchers, and volunteers, the project will raise awareness and promote sustainable practices to safeguard these vital marine species and their habitats for generations to come.

Sustainable

PROJECTS

2. Development of the Protected Areas System, Ethiopia

The UNDP-GEF supported project aims to enhance the sustainable management of Ethiopia’s Protected Areas System, ensuring the conservation of the country's biodiversity, ecosystems, and ecological processes. The overarching goal is to safeguard Ethiopia's natural heritage while promoting local and national economic development. In collaboration with Ethiopian Wildlife Conservation Authority (EWCA), Regional Protected Areas Administrations, and local communities identified priority protection areas that are vital economic assets. WICE produced the first "Ecosystems Map of Ethiopia" and update knowledge and conducted a representativeness analysis to identify additional locations for inclusion in the Protected Areas System.

3. Tropical Forest Restoration

PROJECTS

Initiative, Brazil

In collaboration with Pro- Natura International, WICE works with local communities to restore biodiversity in areas impacted by deforestation, promoting native tree species and sustainable agriculture to reduce pressure on intact forests. The project provides training for indigenous and rural communities in sustainable farming techniques, creating income opportunities while conserving the forest. Rehabilitate degraded sections of the Amazon through reforestation and sustainable agroforestry practices. WICE and ProNatura work with local communities to restore biodiversity in areas impacted by deforestation, promoting native tree species and sustainable agriculture to reduce pressure on intact forests. The project provides training for indigenous and rural communities in sustainable farming techniques, creating income opportunities while conserving the forest. The project has resulted in Reforestation of over 10,000 hectares with native species.

4. Coastal Ecosystem Conservation and Climate Resilience,

PROJECTS

Papua Indonesia

In order to protect coastal ecosystems (mangroves, coral reefs) from climate change impacts and increased economic demand for prawn fishing WICE has partnered with Buma Desa Indonesia to develop coastal conservation plan that involves the restoration of mangrove forests and coral reefs, essential for carbon storage, fisheries, and protection from storm surges. The project integrates community-led sustainable fisheries management and climate adaptation strategies resulting in restoration of over 2,000 hectares of mangroves.

PROJECTS

5.

Solar solutions for Community Development, Benin and Central African Republic

In Benin, WICE is working with local innovator ISTM to deploy solar solutions to reduce deforestation and provide clean energy to underserved communities. ISTM and WICE have the installation of solar energy systems in rural villages in Benin, reducing reliance on

firewood and fossil fuels. The project also provides training for local technicians to maintain solar systems, creating jobs and improving energy access. ISTM and WICE have installed solar panels in 50 rural communities and provided training for local youth in solar panel installation and maintenance.

6.

PROJECTS

Cloud based smart Agriculture Platform , Mexico

WICE has partnered with VEEA to implement a new cloud based agricultural platform that enables the smallholder farmer with data to improve yield and productivity while making farming more sustainable and climate change resilient. The VEEA Edge Precision Agriculture applications at the edge connected directly to small-holder farms through the Veea LoRaWAN gateway and Edge Platform combined with a cloud based ag and climate platform increases productivity on smallholder farms by at least 25%. This increased productivity empowers small holder farmers to embrace the technology due to improved quality of life and to eventually sell excess produce

into local commodity channels and increase economic activity in their community in concert with the Veea Local Partners. Technologies deployed in this innovation sprint have been shown to reduce water, fertilizer, pesticide, herbicide and energy usage by as much as 30% in worldwide deployments to date. The combination of real time sensing on the smallholder farm with the Veea Edge Platform (on a cloud based smart agricultural platform), connects the typically unconnected farmers to a “seed to table” backend capability that optimizes their yield and minimizes waste from crop loss or leakage in the supply chain due to spoilage due to inefficient matching of supply and demand and demonstrates food waste reduction exceeding 15%.

7.

PROJECTS

Solar Power Solutions , Zambia, DRC, Benin and Mozambique

Genesis Energy Group and WICE have formed a critical partnership that will accelerate several investments—in hydropower supporting micro-industries in Mozambique and Democratic Republic of Congo, solar in

Zambia, and the energy transition in Benin. Through this partnership WICE is working with Genesis to build investments in sustainable energy solutions that not only support country mitigation and adaptation targets but also ensure surrounding land is preserved and restored in the process.

PROJECTS

8.

Strengthening ESG Standards in Artisanal and Small-Scale Mining (ASM), DRC, Zimbabwe, South Africa and Mozambique

WICE has partnered with LVC Global to develop sustainable practices across critical minerals and materials (CMMS) in Africa. WICE is developing and implementing training programs for artisanal miners on safe mining techniques, reducing environmental degradation, and improving working conditions.WICE is developing standards and guidance for best practices in environmental impact assessment to ensure that the mining for CMMS follows

environmental best practices, such as managing waste, protecting water sources, and minimizing deforestation.

9.

PROJECTS

Adopt a Ranger, Global

WICE calculated that worldwide about 140,000 park rangers are needed for the protected areas in developing and transition countries. There is no data on how many rangers are employed at the moment, but probably no more than one quarter of the real need. This means that there is a worldwide ranger deficit of 105,000 rangers in the developing and transition countries. Adopt A Ranger has been created to raise funds for the most imminent danger for nature on earth: national parks and nature reserves without park rangers.

10.

EcoTourism Wildlife reserve program,

PROJECTS

CUYABENO WILDLIFE RESERVE , Ecuador

WICE works with the indigenous tribe Cofán to provide eco-tourism activities in the Cofán territory. Under the Cuyabeno wildlife program tourists contribute to the conservation of 590,112 hectares Cuyabeno Wildlife Reserve. Established in 1985, this is the first ecotourism program in Ecuador.

11.

PROJECTS

Women's Legal Aid Bot, Uganda

Using state of the art AI and programmers, WICE and Lion Federal developed the Women's Legal Aid Bot which helps women understand their rights

in cases of gender discrimination, domestic violence, property ownership, custody, and employment issues. Available in both English and 5 local languages, the WLA-Bot enhances legal awareness and empower women in Uganda by enabling them to understand and exercise their rights effectively.

PROJECTS

12.

Comprehensive Protected Areas System Composition and Monitoring, Honduras, Belize, Costa Rica, and Nicaragua

In response to the IUCNs need to develop a comprehensive protected area planning and monitoring system , WICE designed and developed MICOSYS, an open source operational

system that can be adopted, implemented at minimal costs , to help prioritize conservation areas and calculate and allocate funds for protected areas and leverages advanced data analytics, AI, and geospatial information systems (GIS). It was first developed in 2003 for the World Bank and presented at the Worlds Park Congress in 2003 and was designed in support of the Costa Rican government during the management and planning processes of its protected areas. MICOSYS has been adopted and utilized in Costa Rica, Honduras, Panamá and Nicaragua. It has also been adopted by the IUCN, and UNESCO and more recently applied to conservation planning for UNDP and GIZ drylands RED++ project in Ethiopia. MICOSYS integrates multiple dimensions of biodiversity conservation, ensuring a comprehensive strategy that addresses ecological, social, and economic factors. It is adaptable for use at local, national, and global levels, making it

suitable for various contexts and regions. Designed for accessibility, allowing diverse stakeholders to easily navigate the platform and utilize its resources.

13.

PROJECTS

Protected Areas Management informatics harmonization for Latin America and the Caribbean

The InterAmerican Biodiversity Information Network (IABIN) is an Internet based forum for technical and scientific cooperation, which seeks to promote greater coordination among countries to share the use of biodiversity information relevant to decision making and education, as well as a liaison with international initiatives. One of its five thematic networks is the “protected areas

thematic network" (PATN). Exchange of information and data among users requires compatibility of data and good measurement practices. The objective of this work was to promote compatibility of information and data based on concepts of good measuring practices.

14.

Ecosystem mapping of Central America, Guatemala and Belize in the north, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama

Funded by the World Bank and in partnership with Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), the

primary objective of the mapping project was to map and describe the present distribution of eco- systems in Central America. This information was critical to establishing a modern baseline of the status and location of the region's biodiversity, and will be the basis for national and regional biological monitoring programs. This information also allowed the region to move toward the geographical definition of the MBC and will assist the countries in planning long-term land use.